



Innovation and University Relations

2009 collection of resources for service science and smarter planet

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Reference slides

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Service Science, Management and Engineering

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Why SSME?



Service Science or Service Science, Management and Engineering (SSME) is a growing multi-disciplinary research and academic effort that integrates aspects of established fields like computer science, operations research, engineering, management sciences, business strategy, social and cognitive sciences, and legal sciences.

Global markets are increasingly service-based economies. Employment growth will be concentrated in the service-providing sectors of the global economy. Service innovation is needed to maintain profits.

Service design, development, marketing and delivery all require methods to make service businesses more efficient and scalable. Practitioners need depth and breadth in combinations of technology, business, and organizational studies, even at the undergraduate level.

The goal of Service Science is to nourish productivity, quality, and learning and innovation rates across the service sector. We hope the resources on this site help you to better understand and engage in the evolving discipline.

OK, now what?

[Getting started](#)

Take me to the steps we in universities can follow to get involved with service science.

developerWorks briefings


Cloud computing overview

2009-07-14 - 2009-07-14
n/a
Virtual, Various countries

FileNet workshop

2009-07-08 - 2009-07-09
Parsippany, NJ

What's on these pages



Introduction: why service science, how to use this space, how to get started and link to the SSME library wiki.

Learn: articles advancing the science, making the case for service science and press; books, textbooks, selected journals and conference materials.

Teach: shared course modules, lecture materials, syllabuses, tools, case studies, an approach to creating curriculum.

Collaborate: get involved; look at other universities' programs, what's going on with industries, governments; check on special interest groups, BLOGs, related web pages, the Service Research and Innovation Community

Events: workshops, calls for papers, conferences.

Group space for members only is not currently in use. If our readers indicate a desire for a message board we will allow optional sign in with an IBM userid and open up a board.

The **SSME WIKI pages** are a library associated with content on these pages.

SSME WIKI library

* SSME wiki: Long lists, downloads, pdfs and so on..

Group space

Overview

Join space

Description: Service Science, Management and Engineering (SSME) is a growing multi-disciplinary

IBM Services Case Studies for Teaching SSME

IBM Global Business Services >

Case studies

Learn from our success

The breadth of our consulting experience, frankly put, is extraordinary. When you examine the range of problems we've tackled, you'll see we have offered clients innovative thinking and original solutions with real, tangible impact. How may we help you?



Governments around the world. Companies that span the globe. Industries that dig deep into the earth's surface. Enterprises that launch into space. We've covered all that turf, and uncovered some remarkable results along the way. One measure of the trust we've earned is our record of successful consulting engagements with Fortune Global 100 and Fortune Global 500 companies.

Previous IBM Global Business Services engagements may offer you relevant approaches, new ideas or simple inspiration. Feel free to browse case studies for the industries and business functions below.

Search case studies

By industry ▼



By business function ▼



IT Services

Technology services that can deliver measurable business results

What we offer

- Business continuity and resiliency services
- End user services
- Integrated communications services
- Internet Security Systems
- IT strategy and architecture services
- Maintenance and technical support services
- Middleware services
- Outsourcing services
- Server services
- Site and facilities services
- Storage and data services

New and noteworthy

- Server managed services - remote managed infrastructure; supporting efficient, cost-effective server management through a scalable delivery model.

Industry Trend Reports for Teaching SSME

IBM Global Services > IBM Business Consulting > Innovation and research >

IBM Institute for Business Value

THOUGHT LEADERSHIP STARTS HERE

The IBM Institute for Business Value brings leading-edge thinking and practical insights to business executives



The IBM Institute for Business Value provides strategic insights and recommendations that address critical business challenges and help our clients capitalize on new opportunities.

“We work in collaboration with industry experts, leading-edge clients and our own field consultants to provide practical recommendations built on a foundation of fundamental research.”

— George Pohle, Partner and Global Leader, IBM Institute for Business Value.

We're here to help



Easy ways to get the answers you need.



E-mail us

or call us at
1-800-IBM-7080
ext. BCS

Learn more

Innovation and research podcasts

This audio series is brought to you directly from the researchers at the IBM Institute for Business Value. Listen in

Business thought leadership from IBM

Our research is used by senior executives to help them:

- Anticipate changes in their industries
- Prioritize strategic and operational alternatives for action
- Formulate road maps for change initiatives
- Determine the best metrics for measuring success
- Quantify the expected return on their investments.

Well over 100 studies are currently available across many industries and areas of functional expertise.

Search our reports

By industry

By business function

More about the IBM Institute for Business Value

The IBM Institute for Business Value is comprised of 60 consultants who conduct research and analysis in 17 industries and across 5 functional disciplines. The institute is a worldwide presence, drawing on consultants in nine countries to identify issues of global interest and to develop practical recommendations with local relevance.

Real World Challenges MIT Lecture Series

IBM transformation innovation



October 17, 2006

In the inaugural seminar to this series, Linda Sanford, IBM Senior Vice President, Enterprise On Demand Transformation & Information Technology, presented examples of how IBM solved complex business problems in its own transformation and used these learnings to deliver sustained value to clients, employees and society.

Related materials and resources:

- About the lecture and speaker
- ➔ Webcast: Linda Sanford Seminar
- 📄 White Paper: Bilingual Enterprise
- 📄 Case Study: ThinkPlace
- 📄 ThinkPlace Roles
- 📄 ThinkPlace Process Flow and Swi

ThinkPlace patents:

- Autonomic Management System
- Motivational Signature Managem
- Innovation Signature Managem

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Challenges at NYPD: The Real-Time Crime Center



May 3, 2007

Major metropolitan cities, including New York, have seen crime statistics dramatically improve in the past decade. The New York Police Department (NYPD) has played a key role by taking a systems approach that includes innovations in policing, technology and the use of crime information. In this lecture, Jim Onalfo, NYPD CIO and Deputy Commissioner, will discuss the systems plan and impact of the NYPD Real-Time Crime Center, in July 2005 and helped to solve 74% of New York at year.

Related resources:

- About the lecture, speaker, and the Real-Time Crime Center
- ➔ Webcast: NYPD Real-Time Crime Center Seminar
- 📄 Case Study: NYPD Real-Time Crime Center
- 📄 NYPD Real-Time Crime Center
- 📄 NYPD Real-Time Crime Center

Vassar Brothers Medical Center: Challenges in healthcare



December 14, 2006

In this lecture a panel of senior leaders from Vassar Brothers will discuss their strategy covering the technologies, their business investment model, and the

deployment challenges related to social structures and change management. Three specific projects will be discussed: bar-coding to reduce adverse medical events; voice over IP to improve nurse-physician communication and; active RFID to track and optimize mobile assets. Panelists: Daniel Z. Aronzon, M.D., F.A.A.P., President of the Medical Staff; Nicholas Christiano, Jr., Vice President and CIO of HealthQuest; and Stephen A. Katz, M.B. Ch.B., Chief Medical Officer and Senior Vice President of Medical Affairs.

Related materials and resources:

- About the lecture, speakers, and Vassar Brothers Medical Center
- ➔ Webcast: Vassar Brothers Medical Center Seminar
- 📄 Case Study: Wireless healthcare delivery: Adapting to tomorrow's with mobile processes
- 📄 Discussion of the Vassar Brothers IBM-MIT/ESD case study

Let us know if you find these materials useful by providing feedback

Challenges in media and entertainment: Threshold Animation Studios



March 22, 2007

In this lecture, Larry Kasanoff, CEO, Threshold Animation Studios and Producer/Director/Co-creator/Writer, *Foodfight!*, will discuss how Threshold achieved an order-of-magnitude increase in animation complexity, on time and within budget, as well as a fundamental change in the animation process. Their e-studio uses an animation technique known as motion capture, where the movements of live actors are captured via fiber optic sensors and converted directly and in real time to 3D digital files. Threshold's innovation took this mocap technology that plays a peripheral role in the business, customized and enhanced it and made it the foundation of a first-of-its-kind real-time animation system.

Related materials and resources:

- About the lecture, speaker, and Threshold Animation Studios
- ➔ Webcast: Threshold Animation Studios Seminar
- Threshold Animation Studios

Let us know if you find these materials useful by providing feedback!

Smarter Planet Learning Resources

IBM.com for Everyone, Deans, Faculty, Students

The screenshot displays the IBM Smarter Planet website. At the top, the IBM logo is on the left, and a navigation bar includes links for Home, Solutions, Services, Products, Support & downloads, and My IBM. A search bar is also present. Below the navigation bar, the 'Smarter Planet' section is highlighted with a dropdown menu listing various topics: Overview, Energy, Traffic, Food, Infrastructure, Retail, Intelligence, Stimulus, Banking, Telecom, Oil, Healthcare, Cities, Water, Public safety, Buildings, Work, Rail, Products, Education, Government, and Cloud computing. To the right, a 'Conversations' sidebar features three links: 'Blog: Building a smarter planet', 'A smarter planet on Twitter', and 'Smarter planet on Tumblr'. At the bottom right, there is a word cloud graphic.

United States [change]

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Smarter Planet

- Overview
- Healthcare
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- Water
- Food
- Public safety
- Infrastructure
- Buildings
- Retail
- Work
- Intelligence
- Rail
- Stimulus
- Products
- Banking
- Education
- Telecom
- Government
- Oil
- Cloud computing

Can we strike smart?

The economics, technology and environment suggest oil and gas exploration and extraction could be smarter

[Learn about fuel for a smarter planet](#)

Conversations

Blog: Building a smarter planet
See what IBMers think. Tell us what you think.

A smarter planet on Twitter
Surveying the world in 140 characters or less

Smarter planet on Tumblr
Is it getting smart in here or is it just us?

Word Cloud: city, need, transi, low, believe, buildings, system, think, subway, dating, bathro, Ange, attention, Lack, especially, students, clean, issues, technology, zero, training, tools, certainly, area, see, effects, problems, around, important, car, using, car, home, less, frequently, resources, town, away, school, health, care, sm, crim, reduc, Also, lack, problem, need.

Smarter Planet Learning Resources

ibm.com/university/ssme for Faculty & Students

Service Science, Management and Engineering

Tags for this space: [engineering](#), [management](#), [science](#), [service](#), [service_science](#), [ssme](#)

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Articles

- [Environmental News Network: Intelligent Design? Utilities Embrace An Efficiency Evolution](#)
- [EnergyBiz: Intelligent Enterprises and Intelligent Grids Require Intelligent Communications](#)
- [Mongomery Research: The Emergence of the Intelligent Utility: A New View of Service Delivery](#)
- [Carbon Disclosure Project: Making Advances in Carbon Management Best practice from the Carbon Information Leaders A Joint CDP and IBM Study](#)
- [Supply & Demand Chain: Mastering Carbon Management Balancing tradeoffs to optimize supply chain efficiencies](#)
- [pe Power & Energy: Intelligent utilities: the time is here for the next step](#)



Transportation

- [RITA: RITA – Research and Innovative Technology Administration Focus areas and initiatives Communities, documents, articles on ITS](#)
- [ITSA: Intelligent Transportation Society of America; Private and public members including universities](#)
- [ITS: University of Washington](#)
- [IEEE ITS Society](#)
- [MIT: ITS program](#)
- [ITS Institute: University of Minnesota](#)
- [Library of Congress: ITS Quick Study](#)
- [ITS Lab: at Portland State University](#)
- [Turner-Fairbank Highway Research Center](#)



Energy & Grid / Carbon

- [NASA](#)
- [Carbon Management Council](#)
- [Berkeley Lab Earth Sciences Division](#)
- [Urban and Regional Carbon Management](#)
- [Ohio Agricultural Research and Development Center, Carbon management and Sequestration Center](#)
- [Lawrence Livermore Lab](#)
- [US Dept of Energy: Carbon Sequestration Focus Areas Carbon management Science](#)
- [MIT Energy Initiative, Carbon Management](#)
- [University of East Anglia, MBA in Carbon Management](#)
- [gti Carbon Management and Information Center](#)



Skills for smarter planet

- [Technical skills: initial list of skills and definitions \(also see SSME skills\)](#)
- [Business skills: initial list of skills and definitions \(also see SSME skills\)](#)

Water Systems

- [Elsvier Agricultural Water Management Journal](#)
- [US Environmental Protection Agency](#)
- [A Framework for Ecologically Sustainable Water Management](#)

Intelligent Utility

- [IBM THINK](#)
- [IBM Podcast](#)
- [Transmission & Distribution World](#)
- [Free subscription to magazine – Intelligent Utility](#)

Smarter Planet Developer Resources

developerWorks for Developers, Computer Science Students

Overview

Smarter Planet - what it means to you



Why get smarter?

Because we can: the technology is both available and affordable. Because we must: the shocks we've seen to so many systems show that the current approaches aren't sustainable. And because we want to. IBM is starting a conversation with the world because we think now is the time to make these changes for the better.



Dynamic Infrastructure

Gain access to your Applications from anywhere, at any time



Cloud Computing is an emerging style of Information Technology infrastructure designed for rapid delivery of computing resources.

[Cloud Computing Central](#) for developers is your starting point for the latest IBM, developerWorks and general industry information on cloud computing. Discover why cloud computing is important, how to get started, and where to learn more about it.



Smart Work

Embed social software & tools : increase the value of IT solutions



Social networking has changed the way people interact outside and inside the workplace. Adding personalization, participation, and collaboration features can exponentially increase the value of your IT solutions.

The [Social Tools](#) space delivers the latest information about Web 2.0, social software and tools.



Group space

Overview | [Join space](#)

My developerWorks

Work smarter with My developerWorks



My developerWorks is a professional network and knowledge base that connects developers, IT professionals, academics and students around the world, provides career building recognition, and maximizes your productivity through easy to find, targeted technical

resources.

[My developerWorks](#) is for you! Because you matter: your network, your career, and your productivity.



Green IT

Impact energy, efficiency and the environment



In a world that is increasingly connected, a 'smart systems' intelligent approach to offerings, processes, and infrastructures can be the key to solving issues related to energy, the environment and sustainability.

[The GRgreen IT Report](#) helps you learn about adding earth-friendly efficiency into your IT solutions. Find out how to make your applications work smarter, build your green skills, adopt a culture of energy efficiency and reduce energy costs at the heart of your infrastructure.



New Intelligence

Capture and analyze information to make more intelligent choices



Capture and analyze information to make more intelligent choices. Information used to be a river, flowing in one predictable direction with a visible source. Today, it's an ocean of data, constantly expanding its shores. Nearly 15 petabytes of data are created every day - eight times more than the information in all the libraries in the U.S.

Tackle the challenge [with XML knowledge](#) to help sift through massive amounts of data, extract information and transform it into actionable knowledge.

Smarter Planet Learning Resources

ibm.com/developerworks/data/products/cognos for developers, students

Cognos

IBM Cognos™ business intelligence and performance management software forms a foundation for better business and financial decisions.

Updated 07 Aug 2009

Top story



Integrating heterogeneous metadata

Explore usage scenarios for integrating metadata from IBM Cognos Business Intelligence and IBM InfoSphere Information Server. [More](#)

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Enter keyword or leave blank to view entire technical library:

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→ All articles

→ All tutorials

For a comprehensive selection of troubleshooting documents, [search the IBM technical support knowledge base](#).

Downloads, CDs, DVDs

→ Cognos product downloads

→ Cognos support downloads

Learning resources

→ Cognos 8 Business Intelligence information center

→ Techtalk Insider

→ Cognos 8 BI Starter Edition knowledge base

→ Best practice on-demand Web seminars

→ Cognos 8 Financial

→ Cognos implementation roadmaps

Information Management software

We're here to help



Easy ways to get the answers you need.



Call me



E-mail us

Spotlight

- Informix Chat with the lab: Informix and Cognos (August 12)
- Webcast replay: Optimizing your SaaS solution
- Cognos Virtual Finance Forum On-demand
- August 18 Techtalk: How to deliver information your users can trust
- July 21 Techtalk: Unlocking the power of profitability analysis for your business
- Information On Demand 2009 - Register early and save

Latest content

- Setting up SAP Connectivity within IBM Cognos Virtual View Manager
Connect IBM Cognos Virtual View Manager to a SAP R/3 data source. To install the SAP R/3 connectivity add-on and the SAP Java connector, import the needed metadata.
- Cognos 8.4 FP1 - BI Stability Package
Use Apache JMeter to test the stability of an IBM Cognos 8 installation. Use JMeter plan and a document describing setup and usage. T
- Integrating IBM Cognos Planning into a SSL enabled Dispatcher
Enable IBM Cognos Planning to communicate with a SSL-enabled

Smarter Planet Learning Resources (Continued)

ibm.com/developerworks/data/products/

developerWorks > Information Management > Products >

InfoSphere

Find developer resources, tutorials, and articles for IBM InfoSphere software. InfoSphere products enable trusted information by transforming, reconciling, and maintaining information, and delivering it in real time to the people, processes, and applications that need it

Updated 06 Aug 20

Top story



Leverage DataPower SOA Appliances to extend MDM Server security capabilities

Understand the value of a joint deployment of InfoSphere Master Data Management Server and WebSphere DataPower SOA Appliances to protect your master data solution. [More](#)

Downloads, CDs, DVDs

Select a download:

Top downloads

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→ InfoSphere Federation Server Fix Packs

→ Trial: IBM Mashup Center

Learning resources

Select product or component documentation:

WebSphere Federation Server documentation

→ IBM Information Server information center

→ InfoSphere Master Data Management Server information center

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→ Information Integration webcasts

→ Redbooks

→ SQL Replication information roadmap

→ Q Replication information roadmap

Support

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WebSphere Federation Server

→ IBM Software Support toolbar → ISV Resources

Smarter Planet Learning Resources (Continued)

ibm.com/developerworks/data/library/techarticle

IBM Industry Models and ILOG business rules management systems, Part 1: Define business rules using IBM Industry Models

Analysis and design of business rules

[Brian Byrne](#) (byrneb@us.ibm.com), InfoSphere Architecture, IBM
[Greg Imirzian](#) (gimirzian@ilog.com), Technical Alliance Manager, ILOG

Summary: This is the first of two articles in a [series](#) that identifies the nature of business rules and the relationship of these rules to IBM® Industry Models. In particular, this article references the deployment stages of the IBM Industry Models during which rules analysis and design should be considered, and how rules can be identified and managed. The second article in this series discusses taking these analysis and design structures into the ILOG rule management environment to develop completed rulesets.

[View more content in this series](#)

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Date: 18 Sep 2008

Level: Intermediate

PDF: [A4 and Letter](#) (294KB | 17 pages) [Get Adobe® Reader®](#)

Activity: 484 views

Comments: 0 ([Add comments](#))

★★★★★ Average rating (based on 5 votes)

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What are IBM Industry Models?

The IBM Industry Models are a collection of interrelated models addressing different aspects of the analysis and design of applications, data storage, or integration solutions for a particular business domain. The models consist of a set of foundation models, which in turn support a set of detailed models focused on a specific problem or modeling domain.

The foundation models assist in the definition of project scope and in the identification of the dependencies between individual projects that may otherwise have been overlooked. In addition, the foundation models provide the basis on which all other Industry Model offerings are built, providing a lexicon of standard

Table of contents

- [What are IBM Industry Models?](#)
- [Why are business rules important?](#)
- [What is a business rule?](#)
- [Capturing policies and rule statements](#)
- [Conclusion](#)
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- [About the authors](#)

University Initiatives – virtual cross-goal, cross functional effectiveness

Award Programs & Special Initiatives

- Global award programs
 - SUR
 - Faculty awards
 - PhD Fellowships
 - OCR awards
- University Px program
- Special initiatives

Global Awards & Initiatives

Skills Enablement

- AI Relationship Mgmt & Brand Reps
- On site & online enablement training
- Technical briefings & curriculum consulting
- Software downloads & course material

Academic Initiative

Location Specific Research & Education

- 23 centers around the globe for academic collaboration
- Bangalore
 - Toronto
 - Istanbul
 - Cairo
 - Budapest
 - +18 Others

Centers for Advanced Studies

Talent Management & Recruiting

- New global branding team
- Focus on recruiting as GIE

University Relations – Talent & Recruiting

Education Sector Marketing

- Alignment of educational programs & workforce dev't
- Open education roadmap for K -12 plus higher education

Education Sales & Marketing

Global University Programs

University Ecosystem Support Teams

- ▶ Partnership Executives
- ▶ Gov't Programs / Comm's
- ▶ Geography UR Leaders
- ▶ University Steering Committee
- ▶ University Ambassadors
- ▶ Corp Citizenship/Affairs
- ▶ Local CAS Leaders
- ▶ Other Advocates

Global University Programs - Global go-to-market model

Channel Coverage strategy

Direct – IBM to the few

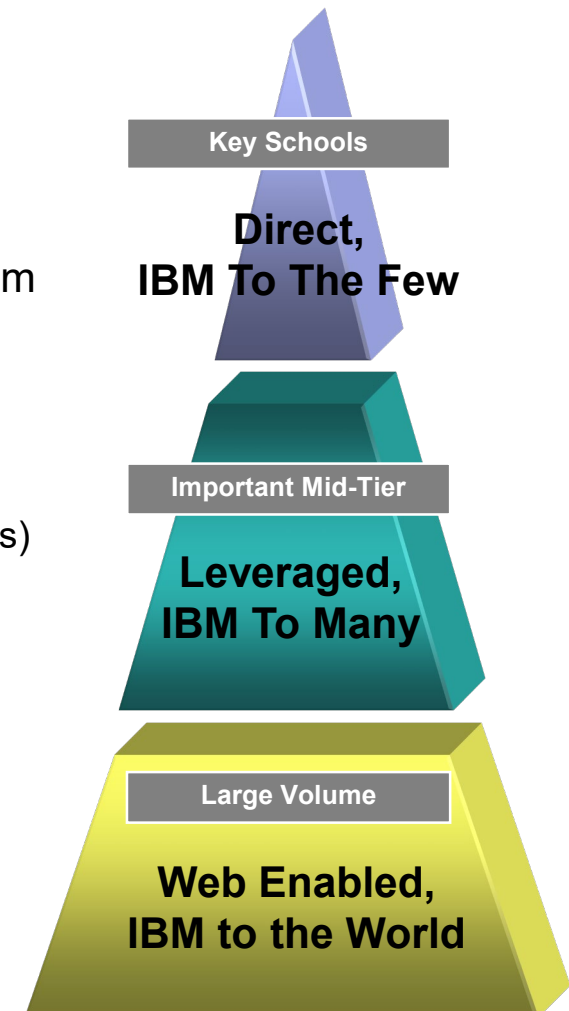
- Global Programs (SUR, OCR, FA, PhD Fellowships)
- Univ Partnership Exec Program (Px)
- Global / Geography / Local UR teams
- Centers for Advanced Studies (CAS)
- AI Relationship Management & University Ambassador Program
- Support for HR's Global Recruitment & Extreme Blue teams
- Specialized initiatives (e.g. LA Grid, Univ & Industry IP Innovation Forum)

Leveraged – IBM to many

- IBM Conferences / Forums (e.g. CASCON, 21st century skills events)
- ACM International Collegiate Programming Contest
- Geography Academic days
- Smarter Planet Univ Jam
- Access to HW/SW Hubs (e.g. VCI/VCL)
- Academic Partnerships (e.g. Google, Walmart)
- Foundations / Consortiums (e.g. SRIL, Kauffman)

Web Enabled – IBM to the world

- Academic Initiative – s/w downloads & course materials
- w3.ibm.com/relations/univeristy
- University profiles (CRM) – one stop shop



Global University Programs – Program Matrix

Research <i>Collaboration in areas of mutual interest & value</i>	<input type="checkbox"/> Shared University Research Awards (SUR) Lilian Wu, GUP <input type="checkbox"/> Faculty Awards Jeff Brody, GUP <input type="checkbox"/> Open Collaborative Research Awards (OCR) Dawn Tew, GUP <input type="checkbox"/> Centers for Advanced Study (CAS) Andy Rindos, SWG <input type="checkbox"/> World Community Grid (with CC&CA) Robin Wilner, CCCA
Skills <i>Building the pipeline</i>	<input type="checkbox"/> Academic Initiative Program (led by SWG) Kevin Faughnan, SWG <input type="checkbox"/> SSME/Smarter Planet Skills for 21 st Century Dianne Fodell & Wendy Murphy, GUP <input type="checkbox"/> LA Grid Initiative (Hispanic Focus) Juan Caraballo, GUP <input type="checkbox"/> Student Contests / Competitions (e.g., ACM) <input type="checkbox"/> Innovation Centers and Developer Relations Mark Hanny, SWG <input type="checkbox"/> MentorMe, Transition2 Higher Educ Shannon Thrasher-Bynes, GUP
Recruiting <i>Acquiring top talent</i>	<input type="checkbox"/> PhD Fellowship Program Jeff Brody, Lilian Wu GUP <input type="checkbox"/> Global Recruitment Campaign (led by HR) <input type="checkbox"/> Global University Sourcing (led by HR) <input type="checkbox"/> Extreme Blue Internship Program (led by HR)
Projects <i>Value creation, sales, and revenue generation</i>	<input type="checkbox"/> Partnership Executive Program (Px) JoAnn Winson, GUP <input type="checkbox"/> Client Executives S&D <input type="checkbox"/> Public Private Partnerships Kevin Reardon, Research <input type="checkbox"/> Industry-Academic IP Collaboration Dawn Tew, GUP

IBM Academic Initiative : Back-to-School 9/2/09



Press, WW email Blast, Top Stories around:

- ✓ **Academic Initiative 5-year anniversary**
- ✓ **Enhanced AI Web Site** <http://www.ibm.com/developerworks/university/academicinitiative/>
 - New “Teaching Topics” view, re-organized content, compressed organization
- ✓ **100+ new course modules** (contributions from across SWG) <https://www.ibm.com/developerworks/university/courseware/>
- ✓ **Updated ACM Mapping Guides**
 - Comp Sci, Info. Systems, Smarter Planet curriculum guide
- ✓ **Innov8 V2.0** <http://www-01.ibm.com/software/solutions/soa/innov8/full.html>
- ✓ **My dW emphasis**
- ✓ **University Jam Report** https://www.ibm.com/developerworks/university/smartplanet_jam/
- ✓ **Telelogic and iLog product availability**



let's build a smarter planet



The IBM Academic Initiative

Our mission

- Partner with academic institutions to better educate millions of students for a smarter planet and more competitive IT workforce

Our offerings

- No-charge access to IBM technology & tools (thousands of software titles)
- No-charge access to course materials and curriculum (hundreds of modules)
- Skills enhancement supported by a worldwide community of IBM volunteers



www.ibm.com/academicinitiative

On-line resources include.....Software Downloads

- **IBM Software** Thousands of full-function, leading-edge software applications available faculty to download at no charge.



faculty can:

- make copies of the software for their students;
- install the software on lab machines only their students access; and
- make the software available on a private network only their students can access

Virtual Computing

• A Sandbox

• System Z Sandbox

• Remote access to hardware

- On-demand demos



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INNOV8 V2.0 – A Serious Game

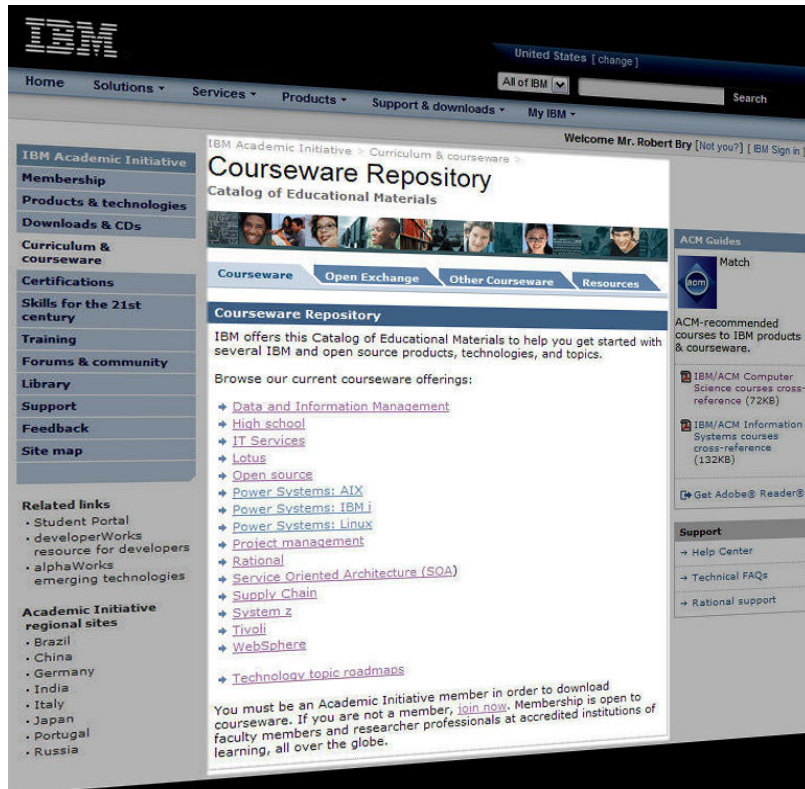


- INNOV8 V2 is an interactive, 3-D business simulator designed to teach the fundamentals of business process management and bridge the gap in understanding between business leaders and IT teams in an organization.



Courseware Repository

...hundreds of industry-leading courses, all at no charge



■ IBM Courseware

More than 250 no-charge course modules created by IBM to help clients get the most from their IT investment. Faculty can use them to enrich their students' classroom experience.

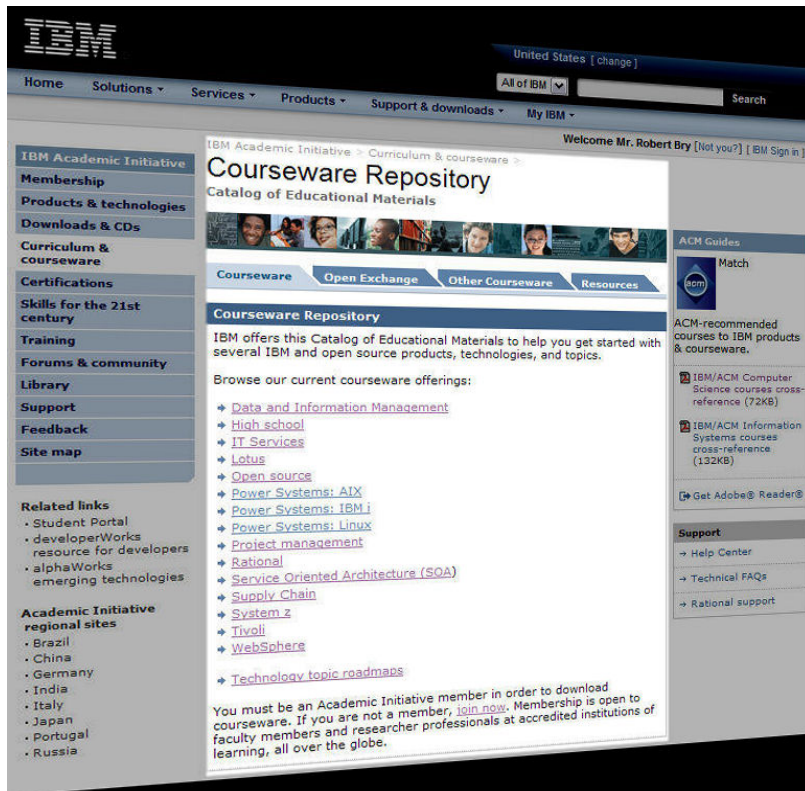
■ Open Courseware Exchange

Did you know that your professors and faculty can share their courseware? Help others leverage the vast knowledge that this community has been creating and share it with other faculty and University contacts who are members of the IBM Academic Initiative.



www.ibm.com/academicinitiative

Courseware Mapping and Technology Roadmaps



- ACM Courseware Mapping provides mapping between IBM products and technologies and Association for Computing Machinery (ACM) recommended courses. Guides are available for Computer Science and Information Systems courses. Find it on our Courseware Repository page.
- Technology Topic Roadmaps provide information on key topics and recommendations on how to teach them.
 - Teaching Business Process Modeling
 - Teaching with Innov8
 - Teaching Enterprise Systems
 - Teaching Rational Team Concert
 - Teaching WebSphere sMash
 - Teaching WebSphere Application Server Community Edition



Classroom and Virtual Training on IBM Technologies



- **IBM Virtual Innovation Center (VIC)** offers comprehensive online training materials on more than 800 online courses supporting a wide range of software, hardware and services topics. The VIC is accessible 24 hours per day, 7 days per week. View the courses online, or download them for off-line study.
- **IBM Innovation Centers** offer a wide range of technical workshops taught by IT architects and brand experts. Academic Initiative members may attend these workshops at no charge on a space-available basis. Go on-line and find the IBM Innovation Center nearest you!



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Student Offerings



- Student Opportunity System allows your students to post their resumes to a database that IBM customers and partners around the world can access to find students with skills needed in the IT industry.
- Student Resources provide easy to use learning roadmaps with links to a wide variety of available online resources on key technologies.
- Topics include
 - Database Technology: DB2 Express-C
 - Enterprise Systems: System z - Introduction to the Mainframe
 - Service Science, Management and Engineering
 - Team-based Development: Jazz and Rational Team Concert
 - Web 2.0 Technology: WebSphere sMash and Lotus Mashups
 - Web Server Technology: WebSphere Application Server Community Edition



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LA Grid Hispanic Focus Initiative



LA Grid Mission Overview

LA Grid, pronounced "LA Grid," is an international multi-disciplinary research community and virtual computing grid enabling institutions and industry to extend beyond their individual reach to facilitate collaborative IT research, education and workforce development.

LA Grid is the first-ever comprehensive computing grid to link faculty, students, and researchers from institutions across the United States, Latin America and Spain to collaborate on complex industry applications for business and societal needs in the context of healthcare, life sciences and disaster mitigation.



LA Grid educational initiatives allow high achieving students to enhance their knowledge and skills through challenging research experiences. Many students in the LA Grid Technology Skills Development Program will receive mentoring from IBM executives, researchers, and engineers and will intern at IBM research and development labs. Tailored advanced degree programs will expand student's knowledge in LA Grid research areas.

Global University Programs – Student Contests & Challenges

On Campus / Local

- Senior Project/Capstone Project Competition
- Business Case Study Competitions
- SOA Student Research Competition

Intended Reach

100's

Funding \$ Levels

- Max \$2.5K per contest
- Total annual amount \$25K

Funding Structure

- Up to 10 contests funded by GUP
- Self funded contests by Px's & local BU's w/ GUP tactical support

Web-enabled One to many

Single country focus

In-person faculty training & student workshops

- The Great Mind Challenge (Growth markets)
- "IBM Cup" SOA/BPM Contest (China)
- Future Shock SSME Contest (India)

1,000's

~ \$25K – 75K per contest

Local stakeholder funded

Web-enabled One to the world

Multi-country focus

General awareness / technology exposure

Training via webcasts & online materials

- Master the Mainframe (Global)
- Cell Broadband Engine (Global)
- IBM Accessibility ODF Coding Challenge (Global)
- System i Innovation Challenge (Global)

10,000's

~ \$75K – \$150K per contest

- In limited instances, up to \$75K per contest w/ at least 50% BU match
- 2 contests per year

3rd Party Driven/ IBM Sponsors

- ACM Int'l Collegiate Programming Contest
- The XML Challenge (Int'l DB2 Users Group)

100K +

~ \$1M – \$2M per contest

Local stakeholder funded

Leveraging social networking to connect to University Students

IBM's MentorMe creating mentoring relationships



Description

An application on facebook™ to connect current university students with IBM employees for the purposes of developing informal mentoring relationships (U.S. and Canada employees and students only for pilot)

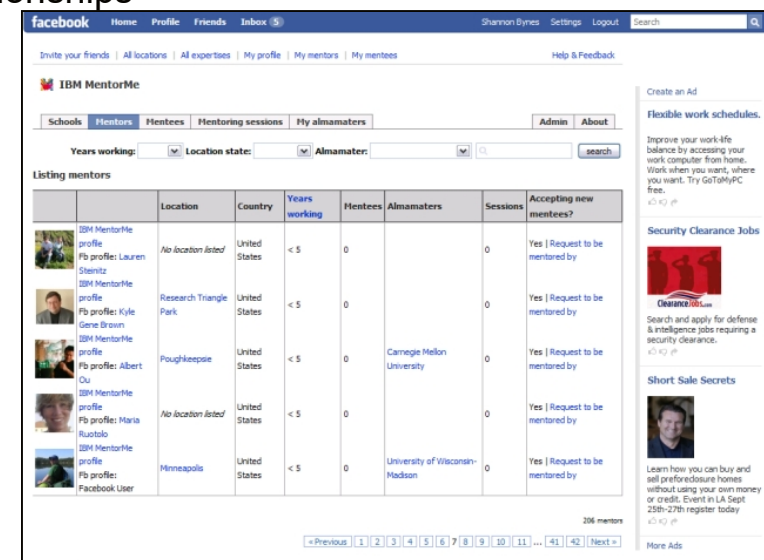
Basic Features

(1) Allow IBMers to join and specify:

- alma mater (including degree and major)
- current work location
- technology or business expertise area
- years at IBM
- availability as mentor
 - chat hours
 - phone availability
 - email availability

(2) Allow students to join and:

- search for IBMers by location, school, years at IBM, and expertise
- request mentorship
- create appointments to chat, phone, or email with a mentor
- share experience with friends to encourage more mentorships



	Location	Country	Years working	Mentees	Alumnus	Sessions	Accepting new mentees?
IBM MentorMe profile Profile: Lauren Sherritt	No location listed	United States	< 5	0		0	Yes Request to be mentored by
IBM MentorMe profile Profile: Kyle Gene Brown	Research Triangle Park	United States	< 5	0		0	Yes Request to be mentored by
IBM MentorMe profile Profile: Albert Ou	Poughkeepsie	United States	< 5	0	Carnegie Mellon University	0	Yes Request to be mentored by
IBM MentorMe profile Profile: Maria Ruotolo	No location listed	United States	< 5	0		0	Yes Request to be mentored by
IBM MentorMe profile Profile: Facebook User	Minneapolis	United States	< 5	0	University of Wisconsin-Madison	0	Yes Request to be mentored by

Transition2 Higher Education – part of the CC&CA Transitions2 initiative under the Global Citizenship Portfolio

Providing resources to IBMers considering second careers in academia

Responding to the Challenge...

- Baby boomer retirement, sector growth, and shortage of leaders in government, education, non-profit sectors
- Need to develop and sustain successful encore careers for greater good in global economy

Purpose of Transition2

- Support employees and retirees considering 2nd careers in social sectors that give back to the community
- Expand upon IBM's successful Transition to Teaching program which has been adopted by other companies and governments



What is Transition2.org?

- An online platform, established with partners in social sectors
- Current and pending partners include: Bridgespan, Partnership for Public Service, United Way, The Chronicle of Higher Education, Council for the Advancement and Support of Education, and individual universities (Marist College, University of Miami to date)
- Transition2 provides **social networking tools, articles, and job information**



THE CHRONICLE OF HIGHER EDUCATION



Where to find more information about university programs.....

Current Award Programs

Faculty Awards

Email: partner@us.ibm.com

Web links: ibm.com/university/facultyawards
w3.ibm.com/university/facultyawards

Contact: Jeffrey Brody/Fishkill/IBM

Open Collaborative Research (OCR) Awards

Email: univrel@us.ibm.com.

Web links:
ibm.com/university/collaborativeresearch ,
w3.ibm.com/university/collaborativeresearch

Contact: Dawn Tew/Raleigh/IBM

Ph.D. Fellowship Program

Email: phdfellow@us.ibm.com

Web links: ibm.com/university/phdfellowship,
w3.ibm.com/university/phdfellowship

Contact: Jeffrey Brody/Fishkill/IBM

Shared University Research (SUR) Awards

Email: univrel@us.ibm.com

Web links: ibm.com/university/sur,
w3.ibm.com/university/sur

Contact: Lilian S Wu/Watson/IBM

Offerings and Strategic Initiatives

LA Grid Initiatives

Web links: latinamericangrid.org/

Contact: Juan Caraballo/Boca Raton/IBM

Growth Markets Leader / Measurements & Metrics

Contact: Bruce Bassett/Somers/IBM

Partnership Executive Program

Contact: JoAnn Washam Winson/Somers/IBM

Web links: w3.ibm.com/university/pep

Services Science, Mathematics & Engineering (SSME) & Smarter Planet for Univ's

Web links: ibm.com/university/ssme
w3.ibm.com/university/ssme

Contact: Wendy Murphy/Raleigh/IBM and Dianne Fodell/Raleigh/IBM

Smarter Planet Jam & Mentor Me....

Contact: Shannon R Thrasher/Southbury/IBM

University Profiles & web offerings

Web links: w3.ibm.com/university , left nav bar:
[University profiles](#)

Contact: Girija Cheruvu/Watson/IBM

IBM Academic Initiatives

Contact: Heather L McClain/Atlanta/IBM

Web Links : ibm.com/university/academicinitiative
w3.ibm.com/university/academicinitiative

Top Solutions for New Intelligence for Smarter Planet

Information Management

- Information on Demand
- Information Agenda
- Information Infrastructure

Predictive Capability

- Business Intelligence
- Business Event Processing
- Analytics Solutions
- Telelogic and Cognos

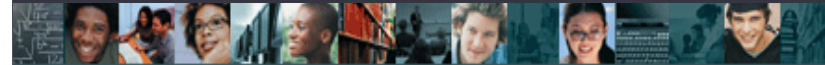
Engaging the Value Chain

- Industry Specific Assets (IA, MRO, Telelogic)
- CRM, SCM and HR Transformation
- Sensor and Actuator
- Information Integration

Business Optimization

- Business Optimization Solutions
- Business Process Management
- Smart SOA
- Information On Demand, Information Agenda
- Information Infrastructure SW and Services

Academic Initiative Related *New Intelligence* Courseware



- *Designing SOA Solutions with the IBM SOA Foundation*
- *Information Management Basics*
- *Architecting the Data Warehouse*
- *Relational Database Design*
- *Changing Business with Data Insight*
- *IBM Informix Dynamic Server Administration*
- *SQL & Database basics*
- *Teaching Business Process Management with Innov8*
- *Teaching Business Process Modeling*
- *Introduction to IBM DB2*
- *Advanced Data Warehouse Workshop: Multi-Dimensional Modeling*
- *DB2 for z/OS Fundamentals*
- *DB2 Family Fundamentals*
- *DB2 SQL Workshop*
- *Designing SOA Solutions with the IBM SOA Foundation*
- *Getting Started with SOA*
- *Implementation Technologies for Service Oriented Designs*
- *The Value of Service Oriented Architecture*
- *IBM WebSphere Business Modeler- Process Simulation and Analysis*
- *Using IBM WebSphere Business Modeler for BPM*

Top Solutions for Smart Work for Smarter Planet

Agile Business Model

- Industry business solutions and Industry framework
- Business Model Innovation services (CBMSOM)
- SOA strategy services
- Smart SOA INSight series

Connected Customers

- Collaboration software and services
- RFID, sensors, actuators, consulting services
- Web 2.0 products and service
- Consulting services for CRM and SCM
- Collaborative Software Development
- WebSphere Commerce
- Mobility & Contact Center Solutions

Dynamic Business Processes

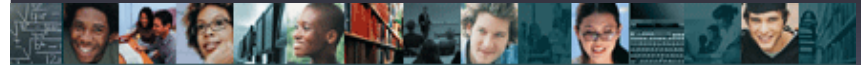
- Key Agility Indicators
- BPM Suite and consulting services
- WebSphere Business Events
- Component Business Modeling services – (KA)
- Enterprise Architecture products and services

Smart SOA

- Smart SOA and SOA solution services
- Application Infrastructure
- Connectivity and Integration
- SOA Sandbox

Academic Initiative

Related Smart Work Courseware



- Designing SOA Solutions with the IBM SOA Foundation
- Assessment Assets for Service Oriented Architecture (SW707)
- Developing Applications with a Service-Oriented Architecture
- Getting Started with SOA
- Implementation Technologies for Service Oriented Designs
- Service Oriented Architecture Design Patterns
- The Value of Service Oriented Architecture
- Fundamentals of IBM Lotus Domino 8 Application Development
- Using IBM Lotus Notes 8 Mail, Calendar, and Contacts
- IBM WebSphere Portal v6.0: Administration 1&2
- IBM WebSphere Business Modeler- Process Simulation and Analysis
- IBM WebSphere Enterprise Service Bus □ Implementing an ESB
- Using IBM WebSphere Business Modeler, Monitor and Process Server for BPM
- IBM WebSphere Commerce V6.0 Hands-on Training for Developers
- Programming XML with Java 1.4
- Teaching Business Process Management with Innov8
- Developing Supply Chains to support Service Operations
- Introduction to XML and Related Technologies
- Teaching Business Process Modeling

Top Solutions for Dynamic Infrastructure for Smarter Planet

Reduce Cost

- Cloud Computing
- Virtualization
- Energy Efficiency
- Information Infrastructure

Improve Service

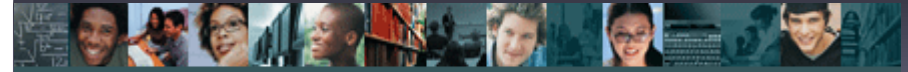
- Service Management
- Asset Management
- Security Management
- Business Resiliency

Manage Risk

- Express Mid-Market Offerings
- Strategic Outsourcing

Academic Initiative:

Related **Dynamic Infrastructure** Courseware



- Foundations in IT Services I and II
- IBM Tivoli Netcool/Proviso 4.4.3 System Administration and Maintenance
- IBM Tivoli Asset Management for IT 7.1 Implementation
- IBM Tivoli Access Manager for Enterprise Single Sign-On Workshop
- IBM Tivoli Business Services Manager 4.1 for Implementers
- IBM Tivoli Composite Appl. Mgr for RTT 6.1 - Install Monitor Deploy
- IBM Tivoli Composite Application Manager for Response Time 6.2 Implement and Admin Workshop
- IBM Tivoli Federated Identity Manager 6.1 - Deployment and Administration
- IBM Tivoli Monitoring 6.2 for Implementers
- IBM Tivoli Netcool/Impact 4.0 - Administration and Implementation
- IBM Tivoli Netcool/OMNibus 7.1 - User
- IBM Tivoli Netcool/Realtime Active Dashboards 3.0 Fundamentals
- IBM Tivoli Network Performance Reporting 3.X User
- IBM Tivoli Provisioning Manager 5.1 - Operations Management Workshop
- Service Desk Management Using IBM Maximo 6 for IT
- Work Management in IBM Maximo 6 for Enterprise Asset Management
- An Introduction to the Mainframe - Large Scale Commercial Computing
- An Introduction to the Mainframe - z/OS Basics
- Linux on System z
- Teaching Enterprise Systems

Top Solutions for Green and Beyond for Smarter Planet

Finding the Value in Green

- Data Center Assessment and Design Services
- Green IT
- Software for a Greener World

Smart Systems

- Intelligent Utility Network and Metering
- Intelligent Transportation
- Consumer Driven Supply Chain
- Intelligent Oilfields, Manufacturing Productivity

Societal Shifts and Corporate Social Responsibility

- CSR and Sustainability
- Carbon Management
- Reputation Management Services
- Ethical Supply Chain Monitoring

*Academic Initiative:
Related **Green and Beyond** Courseware &
Assets*



• *An Introduction to the Mainframe - z/OS Basics*

• **IBM's Software for Greener World**

- Lotus Quickr 8.1
- IBM Content Collector, FileNet
- Information Agenda for Energy & Utilities
- IBM Tivoli Usage and Accounting Manager, IBM Tivoli Monitoring for Energy Management Accounting
- Rational Test Lab Manager Managing
- Lotus Notes, Domino 8.5
- SmartSOA Sandbox Accelerating
- IBM FileNet Business Process Manager,
- IBM FileNet Content Manager
- Lotus Forms & Lotus Forms Turbo
- Telelogic System Architect

<http://www-304.ibm.com/jct01005c/university/scholars/academicinitiative/>